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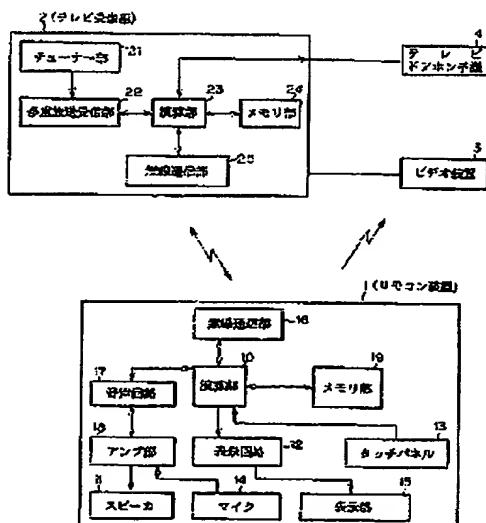
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(54)【発明の名称】 インテリジェントリモコン装置

(57)【要約】

【課題】 文字多点放送対応のTV/VIDEOのリモコン装置にテレビドアホンの親機機能やTV多点放送受信機の一部機能を集約させるとともに、該リモコン装置の各種制御キーをユーザの使いやすいようにする。

【解決手段】 リモコン1側からの受信可能コマンドで、TV受像器2は受信した多点放送データを送出する。無線通信部16を通して多点放送データを受信したリモコン1は、データをメモリ部19にメモリし、同時に消算部10、表示回路12を介し、表示部15に表示する。放送内容が番組録画の場合、タッチパネル13より表示部15に合わせてタッチし、押された所を消算部10で計算し、メモリ部19からコマンドを呼び込み無線通信部16を介してコマンドを送出し、これを受信したTV受像器2は、番組時間にチャネルを切り替え、ビデオ装置3は番組を録画予約する。また、テレビドアホン機4との通話をリモコン1で画面を見ながらできる。



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【特許請求の範囲】

【請求項1】表示用液晶ディスプレイと、該表示用液晶ディスプレイの表示画面との間で入力動作が可能な入力用タッチパネルと、該入力用タッチパネルの入力による制御コマンドデータを通信する無線通信手段を有し、TV多チャンネル放送を受信することが出来るテレビ受像器を少くとも一つの制御対象とする遠隔制御可能なリモコン装置において、前記無線通信手段は、さらに、前記テレビ受像器との間で双方方向の通信を可能とし、受信した音声及び画像データを表示可能とするようにしたことを特徴とするリモコン装置。

【請求項2】前記無線通信手段で受信した前記テレビ受像器によるTV多チャンネル放送のテレビ番組データを前記表示用液晶ディスプレイに表示し、該テレビ番組データを前記表示用液晶ディスプレイに表示し、該テレビ番組データを前記タッチパネルにより選択し、前記制御コマンドデータを無線通信手段で送信することによって、見たいテレビ番組の予約をすることが出来るようにしたことを特徴とする請求項1記載のリモコン装置。

【請求項3】前記無線通信手段で受信した前記テレビ受像器によるTV多チャンネル放送のテレビ番組データを前記表示用液晶ディスプレイに表示し、該テレビ番組データを前記表示用液晶ディスプレイに表示し、該テレビ番組データを前記タッチパネルにより選択し、前記制御コマンドデータを無線通信手段で送信することによって、留守番録画したいテレビ番組の留守番録画予約が出来るようにしたことを特徴とする請求項1記載のリモコン装置。

【請求項4】送信される前記制御コマンドデータを入力する表示画面としてデフォルトで設定されている制御キーとは別に、新たにユーザが作成した制御キーのデバイス及び配線を登録するようにしたことを特徴とする請求項1ないし3のいずれかに記載のリモコン装置。

【請求項5】前記テレビ受像器にテレビドアホン機能の機能を有するようにし、前記無線通信手段は、画像、音声データを受信するとともに、音声入力手段により入力された音声を送信し、受信した来訪者の画像及び音声をディスプレイ等に表示し、ユーザと来訪者との間で通話をするようにしたことを特徴とする請求項1ないし4のいずれかに記載のリモコン装置。

【発明の詳細な説明】

【0001】

【発明の属する技術分野】本発明は、リモコン装置に関するものである。また、本発明は、リモコン装置に付属するリモコン装置に関するものである。

【0002】

【従来の技術】近年、利便性から音声機器を離れた位置から操作できるリモコン装置が使用されるようになったが、その結果として、家庭内のリモコン装置の数が増えすぎて、不利益も生じるといったような状況となってしまった。この様な状況への対処策として1つのリモコン装置で複数の機器を制御出来るリモコン装置が発明されている。

（特開平6-6872号公報）。また、リモコン装置で操作される機器としてTV文字多チャンネル放送を受信、表示できるテレビ受像器も実用されている。

【0003】

【発明が解決しようとする課題】テレビ受像器のリモコン装置を例にとっても分かるように従来のリモコン装置は、全般的にキーの数が多いが、もしくは、キーの数を少くしても同一キーにいくつもの意味付けをしているものが多く、子供やお年寄りなどあまり詳しくない人にとては使いづらいものであった。また、リモコン装置とは直接関係のないことであるが、TV文字多チャンネル放送受信器をつないだ、もしくは内蔵したテレビ受像器は、テレビ受像器自身の機能として受信した文字を表示するのに画面切换もしくはスーパーインボーズで表示していたため、TV放送映像の全体もしくは一部を隠してしまうという問題点があった。さらに、家庭等で誰もが使用し、操作を要する機器としてのテレビドアホン装置を備えている家庭では、テレビを見ている最中に来訪者がある場合、テレビドアホン機能の設置場所まで行って対応しなければならないといった不便があった。

【0004】本発明は、上述の従来技術における問題点に鑑みてなされたもので、文字多チャンネル放送対応のTV/VIDEOPHONEのリモコン装置に家庭等で誰もが使用するテレビドアホンの親機機能やTV多チャンネル放送受信機の一部機能を兼用させるとともに、該リモコン装置の各種制御キーをユーザの使いやすいようにすることをその解決課題とする。

【0005】

【課題を解決するための手段】請求項1の発明は、表示用液晶ディスプレイと、該表示用液晶ディスプレイの表示画面との間で入力動作が可能な入力用タッチパネルと、該入力用タッチパネルの入力による制御コマンドデータを通信する無線通信手段を有し、TV多チャンネル放送を受信することが出来るテレビ受像器を少くとも一つの制御対象とする遠隔制御可能なリモコン装置において、前記無線通信手段は、さらに、前記テレビ受像器との間で双方方向の通信を可能とし、受信した音声及び画像データを表示可能とするようにし、TV文字多チャンネル放送分を手元のリモコン装置でみることを可能とするものである。

【0006】請求項2の発明は、請求項1の発明において、前記無線通信手段で受信した前記テレビ受像器によるTV多チャンネル放送のテレビ番組データを前記表示用液晶ディスプレイに表示し、該テレビ番組データを前記タッチパネルにより選択し、前記制御コマンドデータを無線通信手段で送信することによって、見たいテレビ番組の予約をすることが出来るものである。

【0007】請求項3の発明は、請求項1の発明において、前記無線通信手段で受信した前記テレビ受像器によるTV多チャンネル放送のテレビ番組データを前記表示用液晶ディスプレイに表示し、該テレビ番組データを前記

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タッチパネルにより選択し、前記制御コマンドデータを無線通信手段で送信することによって、留守番録画したいテレビ番組の留守番録画予約が出来るようにしたものである。

【0008】請求項4発明は、請求項1ないし3の発明において、送信される前記制御コマンドデータを入力する表示画面としてデフォルトで設定されている制御キーとは別に、新たにユーザが作成した制御キーのデザイン及び配置を登録するようにし、ユーザの使い勝手を良くすることができるものである。

【0009】請求項5の発明は、請求項1ないし4の発明において、前記テレビ受像器にテレビドアホン機能の機能を有するようにし、前記無線通信手段は、画像、音声データを受信するとともに、音声入力手段により入力された音声を送信し、受信した来訪者の画像及び音声をディスプレイ等に表示し、ユーザと来訪者との間で通話をすることを可能としたものである。

【0010】

【発明の実施の形態】図1は、本発明によるリモコン装置と関連機器との関係を概略的に示す図である。図1に示されるように、このリモコン装置は、一般家庭等で使用されるもので、リモコン1は、TV/VIDE0のリモコンを兼ね、無線による送受信が出来、TV受像器2は、TV多重放送受信機能及びリモコン1との無線送受信部を持っており、またTVドアホン機能の機能を持ち、TVドアホン子機4とつなげることにより、その機能を果すことが出来る。

【0011】図2は、本発明のリモコン装置と関連機器の実施形態の構成を示すブロック図である。図2において、リモコン1は、TV/VIDE0のリモートコントロール機能を持つが、そのための各種コマンドキーは、表示部15とタッチパネル13により表現され、ユーザが表示キーの大きさ、文字の大きさ、キー配置などを設定しメモリ部19に記憶させることにより変更できる。また、テレビ受像器2は一般家庭等に設置され、チューナー部21で選択された放送局5(図1、参照)から放送されるテレビ放送波とTV多重波を受信し、多重放送分は多重放送受信部22へ送られる。多重放送を受信したことを演算部23に知らせ、無線通信部25から多重放送の送信データがあることをリモコン1に知らせるコマンドを送出する。リモコン1側では、このコマンドを受信したら、受信可能をTV受像器2側へ知らせるコマンドを送出する。TV受像器2は、このコマンドを受信したら無線通信部25により受信した多重放送のデータを送出する。このリモコン側からの受信可能なコマンドを一定時間の間受信できなかったら、受信した多重放送のデータをメモリ部24へメモリする。TV受像器2から多重放送のデータを受信したりモコン1は、データをメモリ部19にメモリし、同時に演算部10、表示回路12を介し、表示部15で表示する。ここで、例えば、

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TV多重放送の内容がその局の番組欄の場合には、ユーザがタッチパネル13より表示部15に合わせてタッチすると、どこが押されたかを演算部10で計算し、メモリ部19からコマンドを呼び込み無線通信部16を介してコマンドを送出する。このリモコン1からの番組選択コマンドを受信したTV受像器2は、その時間になつたるその放送チャネルに切り替わり、ビデオ装置3はその番組を録画予約する。

【0012】また、TVドアホン子機4は、来訪者がTVドアホン子機4から呼出を行うと、優先でTV受像器2とつながり、TV受像器2の演算部23を介し、無線通信部25から呼出を知らせるコマンドを送出する。このコマンドを受信したりモコン1は演算部10、表示回路12を介して表示部15に呼出があることを知らせる表示と通話開始コマンドキーの表示をすると同時に、演算部10、音声回路17、アンプ部18を介してスピーカ11から呼出音を発生させる。ここで、ユーザ表示部15に表示されている通話開始キーを選択すると、タッチパネル13から演算部10を介して無線通信部16から通話開始コマンドが送出される。TV受像器2がこのコマンドを受信することによりTVドアホン子機4とりモコン1は通話ができる状態になる。リモコン1による通話は、マイク14からの音声信号を無線通信部16よりTV画像器2に伝えられ、さらに、TVドアホン子機4のスピーカを動作させることによる。

【0013】

【発明の効果】本発明によるリモコン装置およびTV受像器の間で双方向の無線通信ができ、TV多重放送のデータをリモコン装置へ送信することができる所以リモコンの表示部に多重放送の画像について表示することができるとなりテレビ画面を切り替える、または画面の一部をデータ表示でつぶされることがなくなる。また、TV多重放送の番組欄を受信しその表示画面上をタッチパネル入力することにより、TV番組の予約や録画予約が簡単にできる。また、タッチパネルによる入力を行う場合に、選択する制御キーのデザインや配置をユーザの都合により変更することができるので、使い勝手の良い入力手段を有するリモコンが提供されることになる。そして、TVドアホンによる来訪者の対話をテレビを見ながらリモコン側で出来るため、従来のように親機の設置場所まで行かなくても対応が出来る。

【画面の簡単な説明】

【図1】本発明によるリモコン装置と関連機器との関係を概略的に示す図である。

【図2】本発明のリモコン装置と関連機器の実施形態の構成を示すブロック図である。

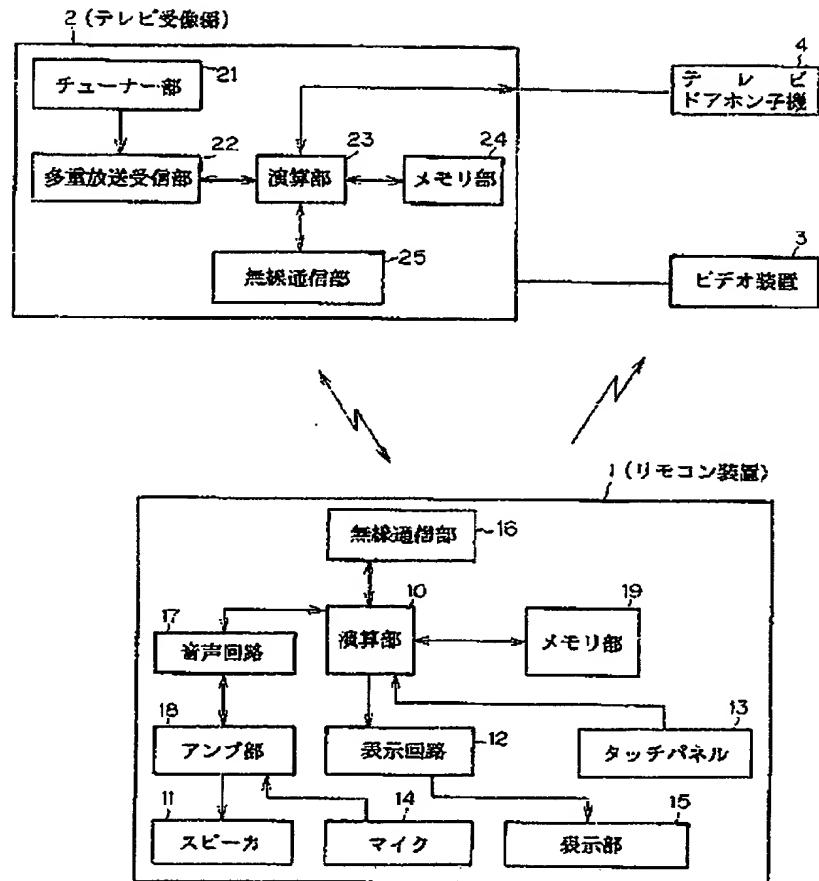
【符号の説明】

1…リモコン、2…TV受像器、3…ビデオ装置、4…TVドアホン子機、10…演算部、11…スピーカ、12…表示回路、13…タッチパネル、14…マイク、15…表示部

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【図2】



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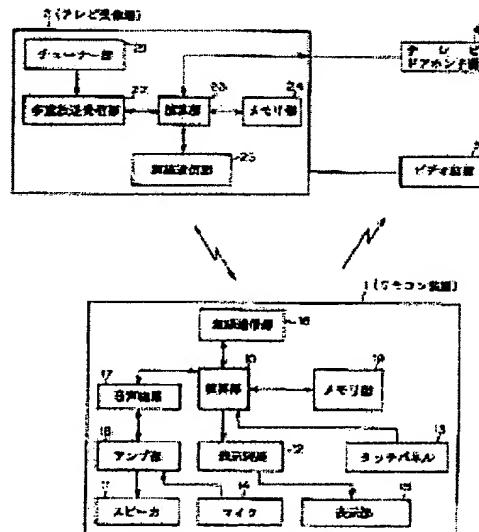
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(54) INTELLIGENT REMOTE CONTROLLER

(57) Abstract:

PROBLEM TO BE SOLVED: To aggregate the base unit function of video doorphone or the partial function of TV multiplex broadcasting receiver to the remote controller of TV/VIDEO corresponding to teletext broadcasting and to make the various control keys of that remote controller easy to use for users.

SOLUTION: Corresponding to a reception enable command from the side of remote controller 1, a TV receiver 2 sends out received multiplex broadcasting data. The remote controller 1, which receives the multiplex broadcasting data through a radio communication part 16, memorizes the data in a memory part 19 and simultaneously displays them through an arithmetic part 10 and a display circuit 12 onto a display part 15. When the contents of broadcasting are the list of programs, the display part 15 is touched from a touch panel 13, the depressed part is calculated by the arithmetic part 10, a command is called from the memory part 19 and sent out through the radio communication part 16 and the TV receiver 2, which receives this command, switched a channel at the time of program. Then, a video instrument 3 reserves the recording of that program. Besides, communication with a video doorphone hand set 4 can be performed by the remote controller 1 while watching a picture.



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(57) **Abstract**

SUBJECT While making the remote control unit of TV/VIDEO corresponding to teletext collect the main phone function of a television intercom, and the partial function of TV multiplex broadcasting receiver, a user tends to use the various control keys of this remote control unit.

Means for Solution By a ready-for-receiving ability command from the remote control 1 side, TV television machine 2 sends out received multiplex broadcasting data. The remote control 1 which received multiplex broadcasting data through the Radio

Communications Department 16 carries out the memory of the data to the memory part 19, and displays it on the indicator 15 via the operation part 10 and the display circuit 12 simultaneously. When contents of broadcast are program columns, according to the indicator 15, it touches from the touch panel 13, A pushed place is calculated by the operation part 10, a command is called in from the memory part 19, a command is sent out via the Radio Communications Department 16, TV television machine 2 which received this changes a channel to program time, and the video device 3 carries out reservation of picture recording of the program. A telephone call with the television intercom slave 4 can be performed looking at a screen with the remote control 1.

Claim(s)

Claim 1 In connection with a liquid crystal display for a display, and a display screen of this liquid crystal display for a display, a touch panel for an input in which input operation is possible, In a remote control unit which makes a television television machine which has a wireless communication means which communicates control command data by an input of this touch panel for an input, and can receive TV multiplex broadcasting at least one controlled object and in which remote control is possible, A remote control unit, wherein said wireless communication means enables a display of a sound and image data which enabled bidirectional communication and received between said television television machines further.

Claim 2 TV program column data of TV multiplex broadcasting with said television television machine received by said wireless communication means is displayed on said liquid crystal display for a display, The remote control unit according to claim 1 characterized by enabling it to reserve a TV program to watch by choosing a program from this TV program column with said touch panel, and transmitting said control command data by a wireless communication means.

Claim 3 TV program column data of TV multiplex broadcasting with said television television machine received by said wireless communication means is displayed on said liquid crystal display for a display, The remote control unit according to claim 1 characterized by what housesitting reservation of picture recording of a TV program to carry out housesitting recording by choosing a program from this TV program column with said touch panel, and transmitting said control command data by a wireless communication means could be made to carry out.

Claim 4 The remote control unit according to any one of claims 1 to 3 which makes it with the feature to have registered a design and arrangement of a control key which a user newly created independently a control key set up by default as a display screen which inputs said control command data transmitted.

Claim 5 Make it have a function of a television intercom main phone in said television television machine, and said wireless communication means, The remote control unit according to any one of claims 1 to 4 transmitting a sound inputted by a voice input means, displaying a picture and a sound of a visitor who received on a display etc., and talking over the telephone between a user and a visitor while receiving a picture and voice data.

Detailed Description of the Invention

0001

Field of the Invention This invention enables bidirectional communication with the television television machine which can receive TV multiplex broadcasting in details more about a remote control unit, and relates to the remote control unit which can control a television television machine and a video device by one set.

0002

Description of the Prior Art In recent years, although the remote control unit which can be operated from the position which separated the electric appliance from convenience

came to be used, the number of domestic remote control units increased too much as the result, and the disadvantage also became a ***** situation. The remote control unit which can control two or more apparatus by one remote control unit as a management measure to such a situation is invented (JP,H6-6872,A). The television television machine which can receive TV teletext and can be displayed as apparatus operated with a remote control unit is also used.

0003

Problem(s) to be Solved by the Invention So that an example may understand the remote control unit of a television television machine very much the conventional remote control unit, There are many keys in all the **, or even if it lessens the number of keys, many are carrying out some semantic attachments to the same key, and it is hard to use for those who are not so detailed, such as a child and an old person. Although it is that it is unrelated to a remote control unit directly, Since it was displaying on the television television machine which connected or contained TV teletext receiver displaying the character received as a function of the television television machine itself by the screen change or the superimposition, there was a problem of invading the whole or a part of TV broadcast image. Everyone used it at home etc., and when there was a visitor in the midst of watching television, there was inconvenience that it had to go and correspond to the setting position of a television intercom main phone at a home provided with the television intercom device as apparatus which requires operation.

0004 This invention is what was made in view of the problem in above-mentioned conventional technology, While making the main phone function of a television intercom and the partial function of TV multiplex broadcasting receiver which everyone uses for the remote control unit of TV/VIDEO corresponding to teletext at home etc. collect, let it be the solution SUBJECT for a user to tend to use the various control keys of this remote control unit.

0005

Means for Solving the Problem An invention of Claim 1 in connection with a liquid crystal display for a display, and a display screen of this liquid crystal display for a display A touch panel for an input in which input operation is possible, In a remote control unit which makes a television television machine which has a wireless communication means which communicates control command data by an input of this touch panel for an input, and can receive TV multiplex broadcasting at least one controlled object and in which remote control is possible, Further, said wireless communication means enables bidirectional communication between said television television machines, is made to enable a display of a sound and image data which received, and makes it possible to see a part for TV teletext with the remote control unit at hand.

0006 An invention of Claim 2 displays TV program column data of TV multiplex broadcasting with said television television machine received by said wireless communication means on said liquid crystal display for a display in an invention of Claim 1, It enables it to reserve a TV program to watch by choosing a program from this TV program column with said touch panel, and transmitting said control command data by a wireless communication means.

0007 An invention of Claim 3 displays TV program column data of TV multiplex broadcasting with said television television machine received by said wireless communication means on said liquid crystal display for a display in an invention of Claim 1, It can be made to perform housesitting reservation of picture recording of a TV program to carry out housesitting recording by choosing a program from this TV program column with said touch panel, and transmitting said control command data by a wireless communication means.

0008 Apart from a control key set up by default as a display screen which inputs said control command data transmitted in an invention of Claims 1-3, the Claim 4 invention, A design and arrangement of a control key which a user newly created are registered, and a user's user-friendliness can be improved.

0009 In an invention of Claims 1-4, make it an invention of Claim 5 have a function of a television intercom main phone in said television television machine, and said wireless

communication means, While receiving a picture and voice data, a sound inputted by a voice input means is transmitted, a picture and a sound of a visitor who received are displayed on a display etc., and it makes it possible to talk over the telephone between a user and a visitor.

0010

Embodiment of the Invention Drawing 1 is a figure showing roughly the relation of the remote control unit and related equipment by this invention. As shown in drawing 1, this remote control unit, It is used in an ordinary home etc. and the remote control 1, The function can be achieved by serving as the remote control of TV/VIDEO, being able to perform transmission and reception by radio, and TV television machine 2 having TV multiplex-broadcasting receiving function and a radio-transmission-and-reception part with the remote control 1, and having a function of a TV intercom main phone, and tying with the TV intercom cordless handset 4.

0011 Drawing 2 is a block diagram showing the composition of the remote control unit of this invention, and the embodiment of a related equipment. Although the remote control 1 has a remote control function of TV/VIDEO, in drawing 2 the various command keys for it, The indicator 15 and the touch panel 13 realize, and when a user sets up the size of a display key, the size of a character, key arrangement, etc. and makes the memory part 19 memorize, it can change. The television television machine 2 is installed in an ordinary home etc., the television broadcasting wave and TV multiple wave which are broadcast from the broadcasting station 5 (drawing 1, reference) selected by the tuner part 21 are received, and a part for multiplex broadcasting is sent to the multiplex-broadcasting receive section 22. The command which tells the operation part 23 about having received multiplex broadcasting, and tells the remote control 1 about that there is send data of multiplex broadcasting from the Radio Communications Department 25 is sent out. In the remote control 1 side, if this command is received, the command which tells ability ready for receiving to the TV television machine 2 side is sent out. TV television machine 2 sends out the data of multiplex broadcasting which received by the Radio Communications Department 25, if this command is received. If the command of the ability ready for receiving from this remote control side is unreceivable between fixed time, the memory of the data of the multiplex report which received will be carried out to the memory part 24. The remote control 1 which received the data of multiplex broadcasting from TV television machine 2 carries out the memory of the data to the memory part 19, and displays it by the indicator 15 via the operation part 10 and the display circuit 12 simultaneously. Here, if a user touches for example, according to the indicator 15 from the touch panel 13 when the contents of TV multiplex broadcasting are the program columns of the office, it calculates where was pushed by the operation part 10, a command is called in from the memory part 19, and a command is sent out via the Radio Communications Department 16. If TV television machine 2 which received the program selection command from this remote control 1 becomes that time, it will change to that broadcasting channel, and the video device 3 carries out reservation of picture recording of that program.

0012 If a visitor performs a call from the TV intercom cordless handset 4, the TV intercom cordless handset 4 is connected with TV television machine 2 in priority, and sends out the command which tells a call from the Radio Communications Department 25 via the operation part 23 of TV television machine 2. Ringing tone is generated from the loudspeaker 11 via the operation part 10, the voice circuit 17, and the amplifier part 18 at the same time it gives the display and the display of a call start command key which tell that the remote control 1 which received this command has a call in the indicator 15 via the operation part 10 and the display circuit 12. Here, selection of the call start key currently displayed on the user indicator 15 will send out the Radio Communications Department 16 to a call start command via the operation part 10 from the touch panel 13. When TV television machine 2 receives this command, the TV intercom cordless handset 4 and the remote control 1 will be in the state where a telephone call is possible. The audio signal from the microphone 14 is conducted to the telephone call with the remote control 1 by the TV picture machine 2 from the Radio Communications Department 16, and it is because the loudspeaker of the TV intercom cordless handset 4

is operated further.

0013

Effect of the Invention Bidirectional radio can be performed between the remote control unit by this invention, and TV television machine, Since the data of TV multiplex broadcasting can be transmitted to a remote control unit, it becomes possible to display the picture of multiplex broadcasting on the indicator of a remote control, and TV footage is changed, or crushing some screens by data display is lost. A request to print out files and reservation of picture recording of TV program can simplify the display screen top by carrying out a touch-panel input by receiving the program column of TV multiplex broadcasting. Since the design and arrangement of a control key to choose can be changed for the sake of a user's convenience when performing the input by a touch panel, the remote control which has a user-friendly input means will be provided. And since the dialog of the visitor by a TV intercom can be performed in the remote control side, watching television, correspondence is possible even if it does not go to the setting position of a main phone like before.

Field of the Invention This invention enables bidirectional communication with the television television machine which can receive TV multiplex broadcasting in details more about a remote control unit, and relates to the remote control unit which can control a television television machine and a video device by one set.

Description of the Prior Art In recent years, although the remote control unit which can be operated from the position which separated the electric appliance from convenience came to be used, the number of domestic remote control units increased too much as the result, and the disadvantage also became a ***** situation. The remote control unit which can control two or more apparatus by one remote control unit as a management measure to such a situation is invented (JP,H6-6872,A). The television television machine which can receive TV teletext and can be displayed as apparatus operated with a remote control unit is also used.

Effect of the Invention Bidirectional radio can be performed between the remote control unit by this invention, and TV television machine, Since the data of TV multiplex broadcasting can be transmitted to a remote control unit, it becomes possible to display the picture of multiplex broadcasting on the indicator of a remote control, and TV footage is changed, or crushing some screens by data display is lost. A request to print out files and reservation of picture recording of TV program can simplify the display screen top by carrying out a touch-panel input by receiving the program column of TV multiplex broadcasting. Since the design and arrangement of a control key to choose can be changed for the sake of a user's convenience when performing the input by a touch panel, the remote control which has a user-friendly input means will be provided. And since the dialog of the visitor by a TV intercom can be performed in the remote control side, watching television, correspondence is possible even if it does not go to the setting position of a main phone like before.

Problem(s) to be Solved by the Invention So that an example may understand the remote control unit of a television television machine very much the conventional remote control unit, There are many keys in all the **, or even if it lessens the number of keys, many are carrying out some semantic attachments to the same key, and it is hard to use for those who are not so detailed, such as a child and an old person. Although it is that it

is unrelated to a remote control unit directly, Since it was displaying on the television television machine which connected or contained TV teletext receiver displaying the character received as a function of the television television machine itself by the screen change or the superimposition, there was a problem of invading the whole or a part of TV broadcast image. Everyone used it at home etc., and when there was a visitor in the midst of watching television, there was inconvenience that it had to go and correspond to the setting position of a television intercom main phone at a home provided with the television intercom device as apparatus which requires operation.

0004This invention is what was made in view of the problem in above-mentioned conventional technology, While making the main phone function of a television intercom and the partial function of TV multiplex broadcasting receiver which everyone uses for the remote control unit of TV/VIDEO corresponding to teletext at home etc. collect, let it be the solution SUBJECT for a user to tend to use the various control keys of this remote control unit.

Means for Solving the ProblemAn invention of Claim 1 in connection with a liquid crystal display for a display, and a display screen of this liquid crystal display for a display A touch panel for an input in which input operation is possible, In a remote control unit which makes a television television machine which has a wireless communication means which communicates control command data by an input of this touch panel for an input, and can receive TV multiplex broadcasting at least one controlled object and in which remote control is possible, Further, said wireless communication means enables bidirectional communication between said television television machines, is made to enable a display of a sound and image data which received, and makes it possible to see a part for TV teletext with the remote control unit at hand.

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Embodiment of the InventionDrawing 1 is a figure showing roughly the relation of the remote control unit and related equipment by this invention. As shown in drawing 1, this remote control unit, It is used in an ordinary home etc. and the remote control 1, The function can be achieved by serving as the remote control of TV/VIDEO, being able to perform transmission and reception by radio, and TV television machine 2 having TV

multiplex-broadcasting receiving function and a radio-transmission-and-reception part with the remote control 1, and having a function of a TV intercom main phone, and tying with the TV intercom cordless handset 4.

0011 Drawing 2 is a block diagram showing the composition of the remote control unit of this invention, and the embodiment of a related equipment. Although the remote control 1 has a remote control function of TV/VIDEO, in drawing 2 the various command keys for it, The indicator 15 and the touch panel 13 realize, and when a user sets up the size of a display key, the size of a character, key arrangement, etc. and makes the memory part 19 memorize, it can change. The television television machine 2 is installed in an ordinary home etc., the television broadcasting wave and TV multiple wave which are broadcast from the broadcasting station 5 (drawing 1, reference) selected by the tuner part 21 are received, and a part for multiplex broadcasting is sent to the multiplex-broadcasting receive section 22. The command which tells the operation part 23 about having received multiplex broadcasting, and tells the remote control 1 about that there is send data of multiplex broadcasting from the Radio Communications Department 25 is sent out. In the remote control 1 side, if this command is received, the command which tells ability ready for receiving to the TV television machine 2 side is sent out. TV television machine 2 sends out the data of multiplex broadcasting which received by the Radio Communications Department 25, if this command is received. If the command of the ability ready for receiving from this remote control side is unreceivable between fixed time, the memory of the data of the multiplex report which received will be carried out to the memory part 24. The remote control 1 which received the data of multiplex broadcasting from TV television machine 2 carries out the memory of the data to the memory part 19, and displays it by the indicator 15 via the operation part 10 and the display circuit 12 simultaneously. Here, if a user touches for example, according to the indicator 15 from the touch panel 13 when the contents of TV multiplex broadcasting are the program columns of the office, it calculates where was pushed by the operation part 10, a command is called in from the memory part 19, and a command is sent out via the Radio Communications Department 16. If TV television machine 2 which received the program selection command from this remote control 1 becomes that time, it will change to that broadcasting channel, and the video device 3 carries out reservation of picture recording of that program.

0012 If a visitor performs a call from the TV intercom cordless handset 4, the TV intercom cordless handset 4 is connected with TV television machine 2 in priority, and sends out the command which tells a call from the Radio Communications Department 25 via the operation part 23 of TV television machine 2. Ringing tone is generated from the loudspeaker 11 via the operation part 10, the voice circuit 17, and the amplifier part 18 at the same time it gives the display and the display of a call start command key which tell that the remote control 1 which received this command has a call in the indicator 15 via the operation part 10 and the display circuit 12. Here, selection of the call start key currently displayed on the user indicator 15 will send out the Radio Communications Department 16 to a call start command via the operation part 10 from the touch panel 13. When TV television machine 2 receives this command, the TV intercom cordless handset 4 and the remote control 1 will be in the state where a telephone call is possible. The audio signal from the microphone 14 is conducted to the telephone call with the remote control 1 by the TV picture machine 2 from the Radio Communications Department 16, and it is because the loudspeaker of the TV intercom cordless handset 4 is operated further.

Brief Description of the Drawings

Drawing 1 It is a figure showing roughly the relation of the remote control unit and related equipment by this invention.

Drawing 2 It is a block diagram showing the composition of the remote control unit of this invention, and the embodiment of a related equipment.

Description of Notations

1 -- **TV intercom cordless handset**, -- A remote control, 2 -- TV television machine, 3 -- A video device, 4 10 -- **Touch panel**, -- Operation part, 11 -- A loudspeaker, 12 -- A display circuit, 13 14 -- **A voice circuit**, 18 / -- **An amplifier part**, 19 / -- **A memory part**, 21 / -- **A tuner part**, 22 / -- **A multiplex-broadcasting receive section**, 23 / -- **Operation part**, 24 / -- **A memory part**, 25 / -- **Radio Communications Department**. -- A microphone, 15 -- An indicator, 16 -- The Radio Communications Department, 17

Drawing 1

For drawings please refer to the original document.

Drawing 2

For drawings please refer to the original document.

For drawings please refer to the original document.
